

What is claimed is:

1. A flat panel display having a matrix-type array of sub-pixels, each of which comprises a driving thin film transistor, a first electrode driven by the driving thin film transistor, and a second electrode driving a light emission unit together with the first electrode,

5 wherein the driving thin film transistor comprises semiconductor channels which are derived from a semiconductor layer, and heterogeneous straight lines are separated from each other on the semiconductor layer, and wherein an imaginary line connecting the semiconductor channels of one column is not parallel to the heterogeneous straight lines.

10 2. The flat panel display according to claim 1, wherein the imaginary line connecting the semiconductor channels of one column is in a non-straight line.

3. The flat panel display according to claim 2, wherein the imaginary line connecting the semiconductor channels of one column is a zig-zag line.

15 4. The flat panel display according to claim 3, wherein the zig-zag line has a regular zig-zag pattern.

5. The flat panel display according to claim 3, wherein the zig-zag line has an
20 irregular zig-zag pattern.

6. The flat panel display according to claim 3, wherein the zig-zag line has a two-step zig-zag pattern.

7. The flat panel display according to claim 3, wherein the zig-zag line has a three-step zig-zag pattern.

8. The flat panel display according to claim 1, wherein the heterogeneous straight
5 lines are separated from each other by the same distance.

9. The flat panel display according to claim 3, wherein the heterogeneous straight lines are separated from each other by the same distance and the width of the zig-zag line is larger than the distance between adjacent two of the heterogeneous straight lines.

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10. A flat panel display having a matrix-type array of sub-pixels, each of which comprises a driving thin film transistor, a first electrode driven by the driving thin film transistor, and a second electrode driving a light emission unit together with the first electrode,

wherein the driving thin film transistor comprises semiconductor channels which are
15 derived from a semiconductor layer, and heterogeneous straight lines are separated from each other on the semiconductor layer, and wherein each of the semiconductor channels comprises at least one of the heterogeneous straight lines.

11. The flat panel display according to claim 10, wherein the semiconductor channels
20 comprise the same number of the heterogeneous straight lines.

12. The flat panel display according to claim 11, wherein each of the semiconductor channels has a length equal to a value obtained by multiplying the width of a laser beam

irradiated for crystallization of amorphous silicon into polycrystalline silicon by the percentage of the area of the semiconductor layer at which overlap of the laser beam does not occur.

13. The flat panel display according to claim 10, wherein the heterogeneous straight
5 lines are separated from each other by the same distance.

14. A flat panel display having a matrix-type array of sub-pixels, each of which
comprises a driving thin film transistor, a first electrode driven by the driving thin film transistor,
and a second electrode driving a light emission unit together with the first electrode,
10 wherein the driving thin film transistor comprises semiconductor channels which are
derived from a semiconductor layer, and heterogeneous straight lines are separated from each
other on the semiconductor layer, and wherein the semiconductor channels are positioned
between the heterogeneous straight lines.

15. The flat panel display according to claim 14, wherein the heterogeneous straight
15 lines are separated from each other by the same distance.